AMENDMENTS TO SPECIFICATION:

     Please replace the paragraph beginning at page 7, line 9, which starts with "In the presently preferred embodiment," with the following amended paragraph:

     In the presently preferred embodiment, matrix generator block 11 first raises each pixel's R, G, and B values (i.e. ~~read~~ red, green, and blue values) to the $1/3$ power. This seemingly bizarre transformation of the image has been experimentally determined to make redeye easier to distinguish. The altered RGB data is converted to YCrCb values where Y represents luminance information and Cr and Cb represent chrominance information. A first threshold T is assigned the value

$$T = Cr_{avg} + 0.2*(Cr_{max} - Cr_{min})$$

where Cr_{avg} is the average chrominance Cr value the rectangular area, Cr_{max} and Cr_{min} are respectively the maximum and minimum chrominance CR values. Matrix generator block 11 generates a matrix by placing a 0 in every corresponding pixel location whose modified Cr value is below T and placing a 1 for every place above T. Each 1 represents a candidate redeye pixel.

     Please replace the paragraph beginning at page 7, line 33, which starts with "Next, a component-connecting block 15" with the following amended paragraph:

     Next, a component-connecting block 15 implements a connected component algorithm that identifies each cohesive group of candidate redeye pixels for individual consideration. In essence, component-connecting block 15 discerns components made up of cohesive candidate pixels and stores them in a list. Preferably, statistical data about each cohesive group of candidate pixels is generated as each component is identified and is stored in the list ~~with~~ of components. The statistical data recorded for each component include, for example, the value of the brightest pixel (preferably in terms of the above described color-based parameter), average brightness or average color-based parameter value, and the component size, which may be a cumulative pixel size. This is accomplished in linear time with respect to the number of pixels by considering each pixel once for

each statistic sought due to the constant number of statistics being recorded and their simple nature.

Please replace the paragraph beginning at page 78 line 10, which starts with "First redeye identifier block 17 now targets " with the following amended paragraph:

First redeye identifier block 17 now targets the component that is most likely to be a redeye pupil. This is determined by picking the component containing the pixel with the highest modified Cr value (i.e. the highest color-based parameter value, which includes a measure of brightness). Applicant has found that this selection metric repeatedly yielded the best results in experiments and was quite uncannily good and linear with respect to the number of components (obviously less than n, where ~~in~~ n is the total number of pixels in the entered image region of interest).